

## SEQUENCE LISTING

<110> Bienkowska, Jadwiga  
 Mcallister, Gregg

<120> Novel Preadipocyte Factor-1-Like Polypeptides

<130> ARS.113

<140> US 10/540,845  
 <141> 2005-06-27

<150> US 60/436,815  
 <151> 2002-12-27

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<170> PatentIn version 3.3

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Phe	Cys	Thr	Ile	Asn	Leu	Asp	Asp	Cys	Ala	Ser	Arg	Pro	Cys	Gln	Arg		
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Gly	Ala	Arg	Cys	Arg	Asp	Arg	Val	His	Asp	Phe	Asp	Cys	Leu	Cys	Pro		
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Pro	Pro	Thr	Thr	Val	Asp	Thr	Pro	Leu	Gly	Pro	Thr	Ser	Ala	Val	Val		
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Val	Pro	Ala	Thr	Gly	Pro	Ala	Pro	His	Ser	Ala	Gly	Ala	Gly	Leu	Leu		
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Arg	Ile	Ser	Val	Lys	Glu	Val	Val	Arg	Arg	Gln	Glu	Ala	Gly	Leu	Gly		
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Glu	Pro	Ser	Leu	Val	Ala	Leu	Val	Val	Phe	Gly	Ala	Leu	Thr	Ala	Ala		
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Val	Cys	Pro	Pro	Gly	Pro	Cys	Cys	Tyr	Pro	Ala	Pro	His	Tyr	Ala	Pro		
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Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys  
                   35                  40                  45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro  
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Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His  
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Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Gly Phe His Gly Arg Asp  
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Cys Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg  
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Asn Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr  
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Cys Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val  
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 Phe Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg  
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 Gly Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro  
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 Ser Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp  
 210 215 220  
 Pro Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val  
 225 230 235 240  
 Val Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu  
 245 250 255  
 Arg Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly  
 260 265 270  
 Glu Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala  
 275 280 285  
 Leu Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly  
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 Val Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro  
 305 310 315 320  
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 Gly Lys Phe Cys Asp Lys Gly Phe His Gly Arg Asp Cys Glu Arg Lys  
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 Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu  
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 Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg  
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 Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile  
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 Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys  
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 Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly  
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 Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr  
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 Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr  
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 Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val  
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 Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu  
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 Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala  
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 Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro  
                     275                    280                    285  
 Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp  
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 Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg  
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Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
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Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
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Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Gly Phe His Gly Arg Asp
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Cys Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg
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Asn Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr
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Cys Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val
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Asp Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp
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Gly Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg
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Phe Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg
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Gly Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro
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Ser Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp
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Pro Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val
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Arg Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly
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Glu Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala
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Leu Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly
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Val Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro
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Ala Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu

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Cys Thr Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp
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Gly Gly Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg
50                      55                      60

Asp Cys Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys
65                      70                      75                      80

Arg Asn Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe
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Thr Cys Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn
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Val Asp Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu
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Asp Gly Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly
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Arg Phe Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln
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Arg Gly Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys
          165                      170                      175

Pro Ser Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro
          180                      185                      190

Asp Pro Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val
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Val Val Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu
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Leu Arg Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu

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 Gly Val Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala  
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 Pro Ala Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly  
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 Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly Gly Glu Tyr His  
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 Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys  
 65                                   70                      75                      80  
 Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val  
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 Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu Met  
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 Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe  
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 Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn  
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 Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg  
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 Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Gly  
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Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val  
 180 185 190  
 Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly  
 195 200 205  
 Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys  
 210 215 220  
 Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val  
 225 230 235 240  
 Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr  
 245 250 255  
 Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly  
 260 265 270  
 Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln  
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 Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys  
 35 40 45  
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 Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro  
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 ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc cac 240  
 Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His  
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Ser Gly Trp Ala Asp Glu His Ile Cys Thr Thr Gln Ser Pro Cys Gln	
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Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala Gly Pro	
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Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys Gln Asp	
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Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val Gly Phe	
145 150 155 160	
gtg ggt gcc cgc tgt gag gta aat gtg gat gac tgc ctg atg cgg cct	528
Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu Met Arg Pro	
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Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe Ser Cys	
180 185 190	
ctc tgt cct gag ggc ttt gct gga cgc ttc tgc acc atc aac ctg gat	624
Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn Leu Asp	
195 200 205	
gac tgt gcc agc cgc cca tgc cag aga ggg gcc cgc tgt cgg gac cgt	672
Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg Asp Arg	
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Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Gly Lys Thr	
225 230 235 240	
tgt gag ctt gtc tta cct gtc cca gac ccc cca acc aca gtg gac acc	768
Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val Asp Thr	
245 250 255	
cct cta ggg ccc acc tca gct gta gtg gta cct gcc acg ggg cca gcc	816
Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly Pro Ala	
260 265 270	
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Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val	
275 280 285	
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Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val Ala Leu	
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Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr Val Leu	

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Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly Pro Cys							
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tgc tac cct gcc cca cac tat gct cca gcg tgc cag gac cag gag tgt							1056
Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln Glu Cys							
		340		345		350	
cag gtt agc atg ctg cca gca ggg ctc ccc ctg cca cgt gac ttg ccc							1104
Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp Leu Pro							
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Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro															
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Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His															
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Ser Gly Trp Ala Asp Glu His Ile Cys Thr Thr Gln Ser Pro Cys Gln															
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Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly Gly Glu Tyr His Cys Val															
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Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala Gly Pro															
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Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys Gln Asp															
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Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val Gly Phe															
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Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu Met Arg Pro															
				165				170						175	

Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe Ser Cys  
                   180                  185                  190  
 Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn Leu Asp  
                   195                  200                  205  
 Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg Asp Arg  
                   210                  215                  220  
 Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Gly Lys Thr  
                   225                  230                  235                  240  
 Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val Asp Thr  
                   245                  250                  255  
 Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly Pro Ala  
                   260                  265                  270  
 Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val  
                   275                  280                  285  
 Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val Ala Leu  
                   290                  295                  300  
 Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr Val Leu  
                   305                  310                  315                  320  
 Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly Pro Cys  
                   325                  330                  335  
 Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln Glu Cys  
                   340                  345                  350  
 Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp Leu Pro  
                   355                  360                  365  
 Pro Glu Pro Gly Lys Thr Thr Ala Leu  
                   370                  375

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 <213> homo sapiens

<400> 9

Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His Cys Asp Leu Ala  
 1                  5                  10                  15  
 His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys Asp Pro Gly Trp  
                   20                  25                  30  
 Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro Gly Cys Gln His  
                   35                  40                  45  
 Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His Ser Gly Trp Ala  
                   50                  55                  60

Asp Glu His Ile Cys Thr Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln  
 65 70 75 80  
 Cys Met Tyr Asp Gly Gly Gly Glu Tyr His Cys Val Cys Leu Pro Gly  
 85 90 95  
 Phe His Gly Arg Asp Cys Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala  
 100 105 110  
 Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe  
 115 120 125  
 Ala Leu Asn Phe Thr Cys Arg Cys Leu Val Gly Phe Val Gly Ala Arg  
 130 135 140  
 Cys Glu Val Asn Val Asp Asp Cys Leu Met Arg Pro Cys Ala Asn Gly  
 145 150 155 160  
 Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu  
 165 170 175  
 Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser  
 180 185 190  
 Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg Asp Arg Val His Asp Phe  
 195 200 205  
 Asp Cys Leu Cys Pro Ser Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val  
 210 215 220  
 Leu Pro Val Pro Asp Pro Pro Thr Thr Val Asp Thr Pro Leu Gly Pro  
 225 230 235 240  
 Thr Ser Ala Val Val Val Pro Ala Thr Gly Pro Ala Pro His Ser Ala  
 245 250 255  
 Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val Val Arg Arg Gln  
 260 265 270  
 Glu Ala Gly Leu Gly Glu Pro Ser Leu Val Ala Leu Val Val Phe Gly  
 275 280 285  
 Ala Leu Thr Ala Ala Leu Val Leu Ala Thr Val Leu Leu Thr Leu Arg  
 290 295 300  
 Ala Trp Arg Arg Gly Val Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala  
 305 310 315 320  
 Pro His Tyr Ala Pro Ala Cys Gln Asp Gln Glu Cys Gln Val Ser Met  
 325 330 335  
 Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp Leu Pro Pro Glu Pro Gly  
 340 345 350  
 Lys Thr Thr Ala Leu  
 355

<210> 10

<211> 383  
 <212> PRT  
 <213> homo sapiens

<400> 10

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Met  Pro  Ser  Gly  Cys  Arg  Cys  Leu  His  Leu  Val  Cys  Leu  Leu  Cys  Ile
1              5              10              15

Leu  Gly  Ala  Pro  Gly  Gln  Pro  Val  Arg  Ala  Asp  Asp  Cys  Ser  Ser  His
              20              25              30

Cys  Asp  Leu  Ala  His  Gly  Cys  Cys  Ala  Pro  Asp  Gly  Ser  Cys  Arg  Cys
              35              40              45

Asp  Pro  Gly  Trp  Glu  Gly  Leu  His  Cys  Glu  Arg  Cys  Val  Arg  Met  Pro
              50              55              60

Gly  Cys  Gln  His  Gly  Thr  Cys  His  Gln  Pro  Trp  Gln  Cys  Ile  Cys  His
65              70              75              80

Ser  Gly  Trp  Ala  Asp  Glu  His  Ile  Cys  Thr  Thr  Gln  Ser  Pro  Cys  Gln
              85              90              95

Asn  Gly  Gly  Gln  Cys  Met  Tyr  Asp  Gly  Gly  Gly  Glu  Tyr  His  Cys  Val
              100              105              110

Cys  Leu  Pro  Gly  Phe  His  Gly  Arg  Asp  Cys  Glu  Arg  Lys  Ala  Gly  Pro
              115              120              125

Cys  Glu  Gln  Ala  Gly  Ser  Pro  Cys  Arg  Asn  Gly  Gly  Gln  Cys  Gln  Asp
              130              135              140

Asp  Gln  Gly  Phe  Ala  Leu  Asn  Phe  Thr  Cys  Arg  Cys  Leu  Val  Gly  Phe
145              150              155              160

Val  Gly  Ala  Arg  Cys  Glu  Val  Asn  Val  Asp  Asp  Cys  Leu  Met  Arg  Pro
              165              170              175

Cys  Ala  Asn  Gly  Ala  Thr  Cys  Leu  Asp  Gly  Ile  Asn  Arg  Phe  Ser  Cys
              180              185              190

Leu  Cys  Pro  Glu  Gly  Phe  Ala  Gly  Arg  Phe  Cys  Thr  Ile  Asn  Leu  Asp
              195              200              205

Asp  Cys  Ala  Ser  Arg  Pro  Cys  Gln  Arg  Gly  Ala  Arg  Cys  Arg  Asp  Arg
              210              215              220

Val  His  Asp  Phe  Asp  Cys  Leu  Cys  Pro  Ser  Gly  Tyr  Gly  Gly  Lys  Thr
225              230              235              240

Cys  Glu  Leu  Val  Leu  Pro  Val  Pro  Asp  Pro  Pro  Thr  Thr  Val  Asp  Thr
              245              250              255

Pro  Leu  Gly  Pro  Thr  Ser  Ala  Val  Val  Val  Pro  Ala  Thr  Gly  Pro  Ala
              260              265              270

Pro  His  Ser  Ala  Gly  Ala  Gly  Leu  Leu  Arg  Ile  Ser  Val  Lys  Glu  Val
              275              280              285

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Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val Ala Leu
 290                295                300

Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr Val Leu
305                310                315                320

Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly Pro Cys
                325                330                335

Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln Glu Cys
                340                345                350

Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp Leu Pro
                355                360                365

Pro Glu Pro Gly Lys Thr Thr Ala Leu His His His His His His
 370                375                380

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<210> 11
<211> 420
<212> DNA
<213> homo sapiens

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<220>
<221> CDS
<222> (1)..(402)

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<400> 11
atg ccc agc ggc tgc cgc tgc ctg cat ctc gtg tgc ctg ttg tgc att      48
Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile
1                5                10                15

ctg ggg gct ccc ggt cag cct gtc cga gcc gat gac tgc agc tcc cac      96
Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His
                20                25                30

tgt gac ctg gcc cac ggc tgc tgt gca cct gac ggc tcc tgc agg tgt      144
Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys
35                40                45

gac ccg ggc tgg gag ggg ctg cac tgt gag cgc tgt gtg agg atg cct      192
Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
50                55                60

ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc cac      240
Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
65                70                75                80

agt ggc tgg gca ggc aag ttc tgt gac aaa gat gaa cat atc tgt acc      288
Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr
85                90                95

acg cag tcc ccc tgc cag aat gga ggc cag tgc atg tat gac ggg ggc      336
Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly
100                105                110

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ggt gag tac cat tgt gtg tgc tta cca ggc ttc cat ggg cgt gac tgc 384  
 Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys  
           115                                  120                                  125

gag cgc aag gct gga ccc caccatcacc atcaccat 420  
 Glu Arg Lys Ala Gly Pro  
           130

<210> 12  
 <211> 134  
 <212> PRT  
 <213> homo sapiens

<400> 12

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile  
 1                          5                                  10                                  15

Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His  
           20                                  25                                  30

Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys  
           35                                  40                                  45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro  
           50                                  55                                  60

Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His  
 65                                  70                                  75                                  80

Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr  
           85                                  90                                  95

Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly  
           100                                  105                                  110

Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys  
           115                                  120                                  125

Glu Arg Lys Ala Gly Pro  
           130

<210> 13  
 <211> 114  
 <212> PRT  
 <213> homo sapiens

<400> 13

Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His Cys Asp Leu Ala  
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His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys Asp Pro Gly Trp  
           20                                  25                                  30

Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro Gly Cys Gln His  
           35                                  40                                  45

Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His Ser Gly Trp Ala  
50 55 60

Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr Thr Gln Ser Pro  
65 70 75 80

Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly Gly Glu Tyr His  
85 90 95

Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala  
100 105 110

Gly Pro

<210> 14

<211> 140

<212> PRT

<213> homo sapiens

<400> 14

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile  
1 5 10 15

Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His  
20 25 30

Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys  
35 40 45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro  
50 55 60

Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His  
65 70 75 80

Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr  
85 90 95

Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly  
100 105 110

Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys  
115 120 125

Glu Arg Lys Ala Gly Pro His His His His His His  
130 135 140

<210> 15

<211> 1167

<212> DNA

<213> homo sapiens

<220>

<221> CDS

&lt;222&gt; (1)..(1149)

&lt;400&gt; 15

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Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile	
1 5 10 15	
ctg ggg gct ccc ggt cag cct gtc cga gcc gat gac tgc agc tcc cac	96
Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His	
20 25 30	
tgt gac ctg gcc cac ggc tgc tgt gca cct gac ggc tcc tgc agg tgt	144
Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys	
35 40 45	
gac ccg ggc tgg gag ggg ctg cac tgt gag cgc tgt gtg agg atg cct	192
Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro	
50 55 60	
ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc cac	240
Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His	
65 70 75 80	
agt ggc tgg gca ggc aag ttc tgt gac aaa gat gaa cat atc tgt acc	288
Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr	
85 90 95	
acg cag tcc ccc tgc cag aat gga ggc cag tgc atg tat gac ggg ggc	336
Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly	
100 105 110	
ggt gag tac cat tgt gtg tgc tta cca ggc ttc cat ggg cgt gac tgc	384
Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys	
115 120 125	
gag cgc aag gct gga ccc tgt gaa cag gca ggc tcc cca tgc cgc aat	432
Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn	
130 135 140	
ggc ggg cag tgc cag gac gac cag ggc ttt gct ctc aac ttc acg tgc	480
Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys	
145 150 155 160	
cgc tgc ttg gtg ggc ttt gtg ggt gcc cgc tgt gag gta aat gtg gat	528
Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp	
165 170 175	
gac tgc ctg atg cgg cct tgt gct aac ggt gcc acc tgc ctt gac ggc	576
Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly	
180 185 190	
ata aac cgc ttc tcc tgc ctc tgt cct gag ggc ttt gct gga cgc ttc	624
Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe	
195 200 205	
tgc acc atc aac ctg gat gac tgt gcc agc cgc cca tgc cag aga ggg	672
Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly	
210 215 220	

gcc cgc tgt cgg gac cgt gtc cac gac ttc gac tgc ctc tgc ccc agt 720  
 Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser  
 225 230 235 240  
  
 ggc tat ggt ggc aag acc tgt gag ctt gtc tta cct gtc cca gac ccc 768  
 Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro  
 245 250 255  
  
 cca acc aca gtg gac acc cct cta ggg ccc acc tca gct gta gtg gta 816  
 Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val  
 260 265 270  
  
 cct gcc acg ggg cca gcc ccc cac agc gca ggg gct ggt ctg ctg cgg 864  
 Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg  
 275 280 285  
  
 atc tca gtg aag gag gtg gtg cgg agg caa gag gct ggg cta ggt gag 912  
 Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu  
 290 295 300  
  
 cct agc ttg gtg gcc ctg gtg gtg ttt ggg gcc ctc act gct gcc ctg 960  
 Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu  
 305 310 315 320  
  
 gtt ctg gct act gtg ttg ctg acc ctg agg gcc tgg cgc cgg ggt gtc 1008  
 Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val  
 325 330 335  
  
 tgc ccc cct gga ccc tgt tgc tac cct gcc cca cac tat gct cca gcg 1056  
 Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala  
 340 345 350  
  
 tgc cag gac cag gag tgt cag gtt agc atg ctg cca gca ggg ctc ccc 1104  
 Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu Pro  
 355 360 365  
  
 ctg cca cgt gac ttg ccc cct gag cct gga aag acc aca gca ctg 1149  
 Leu Pro Arg Asp Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala Leu  
 370 375 380  
  
 caccatcacc atcaccat 1167

<210> 16  
 <211> 383  
 <212> PRT  
 <213> homo sapiens

<400> 16

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile  
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 Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His  
 20 25 30  
  
 Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys  
 35 40 45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro  
 50 55 60  
 Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His  
 65 70 75 80  
 Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr  
 85 90 95  
 Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly  
 100 105 110  
 Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys  
 115 120 125  
 Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn  
 130 135 140  
 Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys  
 145 150 155 160  
 Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp  
 165 170 175  
 Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly  
 180 185 190  
 Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe  
 195 200 205  
 Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly  
 210 215 220  
 Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser  
 225 230 235 240  
 Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro  
 245 250 255  
 Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val  
 260 265 270  
 Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg  
 275 280 285  
 Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu  
 290 295 300  
 Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu  
 305 310 315 320  
 Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val  
 325 330 335  
 Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala  
 340 345 350  
 Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu Pro  
 355 360 365

Leu Pro Arg Asp Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala Leu  
 370 375 380

<210> 17  
 <211> 363  
 <212> PRT  
 <213> homo sapiens

<400> 17

Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His Cys Asp Leu Ala  
 1 5 10 15  
 His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys Asp Pro Gly Trp  
 20 25 30  
 Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro Gly Cys Gln His  
 35 40 45  
 Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His Ser Gly Trp Ala  
 50 55 60  
 Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr Thr Gln Ser Pro  
 65 70 75 80  
 Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly Gly Glu Tyr His  
 85 90 95  
 Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala  
 100 105 110  
 Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys  
 115 120 125  
 Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val  
 130 135 140  
 Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu Met  
 145 150 155 160  
 Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe  
 165 170 175  
 Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn  
 180 185 190  
 Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg  
 195 200 205  
 Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Gly  
 210 215 220  
 Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val  
 225 230 235 240  
 Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly  
 245 250 255

Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys  
                   260                  265                  270  
 Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val  
                   275                  280                  285  
 Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr  
                   290                  295                  300  
 Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly  
 305                  310                  315                  320  
 Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln  
                   325                  330                  335  
 Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp  
                   340                  345                  350  
 Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala Leu  
                   355                  360

<210> 18  
 <211> 389  
 <212> PRT  
 <213> homo sapiens

<400> 18

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile  
 1                  5                  10                  15  
 Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His  
                   20                  25                  30  
 Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys  
                   35                  40                  45  
 Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro  
                   50                  55                  60  
 Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His  
 65                  70                  75                  80  
 Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr  
                   85                  90                  95  
 Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly  
                   100                  105                  110  
 Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys  
                   115                  120                  125  
 Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn  
                   130                  135                  140  
 Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys  
 145                  150                  155                  160

Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp  
 165 170 175  
 Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly  
 180 185 190  
 Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe  
 195 200 205  
 Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly  
 210 215 220  
 Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser  
 225 230 235 240  
 Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro  
 245 250 255  
 Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val  
 260 265 270  
 Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg  
 275 280 285  
 Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu  
 290 295 300  
 Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu  
 305 310 315 320  
 Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val  
 325 330 335  
 Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala  
 340 345 350  
 Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu Pro  
 355 360 365  
 Leu Pro Arg Asp Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala Leu His  
 370 375 380  
 His His His His His  
 385

<210> 19

<211> 37

<212> DNA

<213> Artificial sequence

<220>

<223> SCS0009SV3-EX1 primer

<400> 19

aagcaggctt cgccaccatg cccagcggct gccgctg

<210> 20  
 <211> 35  
 <212> DNA  
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 <220>  
 <223> SCS0009SV3-EX2 primer  
  
 <400> 20  
 gtgatggtga tgggtgcagtg ctgtggtcctt tccag 35  
  
 <210> 21  
 <211> 37  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> GCP Forward  
  
 <400> 21  
 ggggacaagt ttgtacaaaa aagcaggctt cgccacc 37  
  
 <210> 22  
 <211> 51  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> GCP Reverse  
  
 <400> 22  
 ggggaccact ttgtacaaga aagctggggt tcaatggtga tggatgatggt g 51  
  
 <210> 23  
 <211> 20  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> SCS0009SV3-SP1 primer  
  
 <400> 23  
 tgatgcggcc ttgtgctaac 20  
  
 <210> 24  
 <211> 20  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> pEAK12F primer  
  
 <400> 24  
 gccagcttgg cacttgatgt 20

<210> 25  
 <211> 20  
 <212> DNA  
 <213> Artificial sequence

<220>  
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<400> 25  
 gatggagggtg gacgtgtcag 20

<210> 26  
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<220>  
 <223> 21M13 primer

<400> 26  
 tgtaaaacga cggccagt 18

<210> 27  
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 <212> DNA  
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<220>  
 <223> M13REV primer

<400> 27  
 caggaaacag ctatgacc 18

<210> 28  
 <211> 20  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> T7 primer

<400> 28  
 taatacgact cactataggg 20

<210> 29  
 <211> 18  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> SP6 primer

<400> 29  
 atttaggtga cactatag 18

<210> 30  
 <211> 37  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> SCS0009SV4-EX1 primer  
  
 <400> 30  
 aagcaggctt cgccaccatg cccagcggct gccgctg 37  
  
 <210> 31  
 <211> 35  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> SCS0009SV4-EX2 primer  
  
 <400> 31  
 gtgatggtga tgggtggggtc cagccttgcg ctgcg 35  
  
 <210> 32  
 <211> 34  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> SCS0009-AP1 primer  
  
 <400> 32  
 accatgccca gcggctgccg ctgcctgcat ctgcg 34  
  
 <210> 33  
 <211> 36  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> SCS0009-AP2 primer  
  
 <400> 33  
 agtcacgccc atggaagcct ttgtcacaga acttgc 36  
  
 <210> 34  
 <211> 38  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> SCS0009-AP3 primer  
  
 <400> 34

gcaagttctg tgacaaaggc ttccatgggc gtgactgc

38

<210> 35  
 <211> 39  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> SCS0009-AP4 primer

<400> 35  
 tcacagtgc gtggtctttc caggctcagg gggcaagtc

39

<210> 36  
 <211> 37  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> SCS0009-EX1 primer

<400> 36  
 aagcaggctt cgccaccatg cccagcggct gccgctg

37

<210> 37  
 <211> 35  
 <212> DNA  
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<220>  
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<400> 37  
 gtgatggtga tgggtgcagtg ctgtggtctt tccag

35

<210> 38  
 <211> 385  
 <212> PRT  
 <213> Mus musculus

<400> 38

Met Ile Ala Thr Gly Ala Leu Leu Arg Val Leu Leu Leu Leu Leu Ala  
 1 5 10 15

Phe Gly His Ser Thr Tyr Gly Ala Glu Cys Asp Pro Pro Cys Asp Pro  
 20 25 30

Gln Tyr Gly Phe Cys Glu Ala Asp Asn Val Cys Arg Cys His Val Gly  
 35 40 45

Trp Glu Gly Pro Leu Cys Asp Lys Cys Val Thr Ala Pro Gly Cys Val  
 50 55 60

Asn Gly Val Cys Lys Glu Pro Trp Gln Cys Ile Cys Lys Asp Gly Trp

65		70		75		80	
Asp Gly Lys Phe	Cys Glu Ile Asp Val	Arg Ala Cys Thr Ser Thr Pro					
	85	90	95				
Cys Ala Asn Asn Gly Thr Cys Val	Asp Leu Glu Lys Gly Gln Tyr Glu						
	100	105	110				
Cys Ser Cys Thr Pro Gly Phe Ser Gly Lys Asp Cys Gln His Lys Ala							
	115	120	125				
Gly Pro Cys Val Ile Asn Gly Ser Pro Cys Gln His Gly Gly Ala Cys							
	130	135	140				
Val Asp Asp Glu Gly Gln Ala Ser His Ala Ser Cys Leu Cys Pro Pro							
	145	150	155				
Gly Phe Ser Gly Asn Phe Cys Glu Ile Val Ala Ala Thr Asn Ser Cys							
	165	170	175				
Thr Pro Asn Pro Cys Glu Asn Asp Gly Val Cys Thr Asp Ile Gly Gly							
	180	185	190				
Asp Phe Arg Cys Arg Cys Pro Ala Gly Phe Val Asp Lys Thr Cys Ser							
	195	200	205				
Arg Pro Val Ser Asn Cys Ala Ser Gly Pro Cys Gln Asn Gly Gly Thr							
	210	215	220				
Cys Leu Gln His Thr Gln Val Ser Phe Glu Cys Leu Cys Lys Pro Pro							
	225	230	235				
Phe Met Gly Pro Thr Cys Ala Lys Lys Arg Gly Ala Ser Pro Val Gln							
	245	250	255				
Val Thr His Leu Pro Ser Gly Tyr Gly Leu Thr Tyr Arg Leu Thr Pro							
	260	265	270				
Gly Val His Glu Leu Pro Val Gln Gln Pro Glu Gln His Ile Leu Lys							
	275	280	285				
Val Ser Met Lys Glu Leu Asn Lys Ser Thr Pro Leu Leu Thr Glu Gly							
	290	295	300				
Gln Ala Ile Cys Phe Thr Ile Leu Gly Val Leu Thr Ser Leu Val Val							
	305	310	315				
Leu Gly Thr Val Ala Ile Val Phe Leu Asn Lys Cys Glu Thr Trp Val							
	325	330	335				
Ser Asn Leu Arg Tyr Asn His Thr Phe Arg Lys Lys Lys Asn Leu Leu							
	340	345	350				
Leu Gln Tyr Asn Ser Gly Glu Glu Leu Ala Val Asn Ile Ile Phe Pro							
	355	360	365				
Glu Lys Ile Asp Met Thr Thr Phe Asn Lys Glu Ala Gly Asp Glu Glu							
	370	375	380				

Ile  
385

<210> 39  
<211> 294  
<212> PRT  
<213> Homo sapiens

<400> 39

Met	Pro	Ser	Gly	Cys	Arg	Cys	Leu	His	Leu	Val	Cys	Leu	Leu	Cys	Ile	1	5	10	15
Leu	Gly	Ala	Pro	Gly	Gln	Pro	Val	Arg	Ala	Asp	Asp	Cys	Ser	Ser	His	20	25	30	
Cys	Asp	Leu	Ala	His	Gly	Cys	Cys	Ala	Pro	Asp	Gly	Ser	Cys	Arg	Cys	35	40	45	
Asp	Pro	Gly	Trp	Glu	Gly	Leu	His	Cys	Glu	Arg	Cys	Val	Arg	Met	Pro	50	55	60	
Gly	Cys	Gln	His	Gly	Thr	Cys	His	Gln	Pro	Trp	Gln	Cys	Ile	Cys	His	65	70	75	
Ser	Gly	Trp	Ala	Asp	Glu	His	Ile	Cys	Thr	Thr	Gln	Ser	Pro	Cys	Gln	85	90	95	
Asn	Gly	Gly	Gln	Cys	Met	Tyr	Asp	Gly	Gly	Gly	Glu	Tyr	His	Cys	Val	100	105	110	
Cys	Leu	Pro	Gly	Phe	His	Gly	Arg	Asp	Cys	Glu	Arg	Lys	Ala	Gly	Pro	115	120	125	
Cys	Glu	Gln	Ala	Gly	Ser	Pro	Cys	Arg	Asn	Gly	Gly	Gln	Cys	Gln	Asp	130	135	140	
Asp	Gln	Gly	Phe	Ala	Leu	Asn	Phe	Thr	Cys	Arg	Cys	Leu	Val	Gly	Phe	145	150	155	
Val	Gly	Ala	Arg	Cys	Glu	Val	Asn	Val	Asp	Asp	Cys	Leu	Met	Arg	Pro	165	170	175	
Cys	Ala	Asn	Gly	Ala	Thr	Cys	Leu	Asp	Gly	Ile	Asn	Arg	Phe	Ser	Cys	180	185	190	
Leu	Cys	Pro	Glu	Gly	Phe	Ala	Gly	Arg	Phe	Cys	Thr	Ile	Asn	Leu	Asp	195	200	205	
Asp	Cys	Ala	Ser	Arg	Pro	Cys	Gln	Arg	Gly	Ala	Arg	Cys	Arg	Asp	Arg	210	215	220	
Val	His	Asp	Phe	Asp	Cys	Leu	Cys	Pro	Ser	Gly	Tyr	Gly	Gly	Lys	Thr	225	230	235	
Cys	Glu	Leu	Val	Leu	Pro	Val	Pro	Asp	Pro	Pro	Thr	Thr	Val	Asp	Thr	245	250	255	

Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly Pro Ala  
260 265 270

Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val  
275 280 285

Val Arg Arg Gln Glu Ala  
290

<210> 40  
<211> 300  
<212> PRT  
<213> Homo sapiens

<400> 40

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile  
1 5 10 15

Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His  
20 25 30

Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys  
35 40 45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro  
50 55 60

Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His  
65 70 75 80

Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr  
85 90 95

Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly  
100 105 110

Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys  
115 120 125

Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn  
130 135 140

Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys  
145 150 155 160

Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp  
165 170 175

Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly  
180 185 190

Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe  
195 200 205

Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly  
210 215 220

Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser  
 225 230 235 240  
 Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro  
 245 250 255  
 Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val  
 260 265 270  
 Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg  
 275 280 285  
 Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala  
 290 295 300

<210> 41  
 <211> 1131  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> exon  
 <222> (1)..(1131)

<400> 41  
 atg ccc agc ggc tgc cgc tgc ctg cat ctc gtg tgc ctg ttg tgc att 48  
 Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile  
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 ctg ggg gct ccc ggt cag cct gtc cga gcc gat gac tgc agc tcc cac 96  
 Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His  
 20 25 30  
 tgt gac ctg gcc cac ggc tgc tgt gca cct gac ggc tcc tgc agg tgt 144  
 Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys  
 35 40 45  
 gac ccg ggc tgg gag ggg ctg cac tgt gag cgc tgt gtg agg atg cct 192  
 Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro  
 50 55 60  
 ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc cac 240  
 Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His  
 65 70 75 80  
 agt ggc tgg gca gat gaa cat atc tgt acc acg cag tcc ccc tgc cag 288  
 Ser Gly Trp Ala Asp Glu His Ile Cys Thr Thr Gln Ser Pro Cys Gln  
 85 90 95  
 aat gga ggc cag tgc atg tat gac ggg ggc ggt gag tac cat tgt gtg 336  
 Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly Gly Glu Tyr His Cys Val  
 100 105 110  
 tgc tta cca ggc ttc cat ggg cgt gac tgc gag cgc aag gct gga ccc 384  
 Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala Gly Pro  
 115 120 125

tgt gaa cag gca ggc tcc cca tgc cgc aat ggc ggg cag tgc cag gac Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys Gln Asp 130 135 140	432
gac cag ggc ttt gct ctc aac ttc acg tgc cgc tgc ttg gtg ggc ttt Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val Gly Phe 145 150 155 160	480
gtg ggt gcc cgc tgt gag gta aat gtg gat gac tgc ctg atg cgg cct Val Gly Ala Arg Cys Glu Val Asn Val Asp Cys Leu Met Arg Pro 165 170 175	528
tgt gct aac ggt gcc acc tgc ctt gac ggc ata aac cgc ttc tcc tgc Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe Ser Cys 180 185 190	576
ctc tgt cct gag ggc ttt gct gga cgc ttc tgc acc atc aac ctg gat Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn Leu Asp 195 200 205	624
gac tgt gcc agc cgc cca tgc cag aga ggg gcc cgc tgt cgg gac cgt Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg Asp Arg 210 215 220	672
gtc cat gac ttc gac tgc ctc tgc ccc agt ggc tat ggt ggc aag act Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Gly Lys Thr 225 230 235 240	720
tgt gag ctt gtc tta cct gtc cca gac ccc cca acc aca gtg gac acc Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val Asp Thr 245 250 255	768
cct cta ggg ccc acc tca gct gta gtg gta cct gcc acg ggg cca gcc Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly Pro Ala 260 265 270	816
ccc cac agc gca ggg gct ggt ctg ctg cgg atc tca gtg aag gag gtg Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val 275 280 285	864
gtg cgg agg caa gag gct ggg cta ggt gag cct agc ttg gtg gcc ctg Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val Ala Leu 290 295 300	912
gtg gtg ttt ggg gcc ctc act gct gcc ctg gtt ctg gct act gtg ttg Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr Val Leu 305 310 315 320	960
ctg acc ctg agg gcc tgg cgc cgg ggt gtc tgc ccc cct gga ccc tgt Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly Pro Cys 325 330 335	1008
tgc tac cct gcc cca cac tat gct cca gcg tgc cag gac cag gag tgt Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln Glu Cys 340 345 350	1056
cag gtt agc atg ctg cca gca ggg ctc ccc ctg cca cgt gac ttg ccc Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp Leu Pro 355 360 365	1104

cct gag cct gga aag acc aca gca ctg  
 Pro Glu Pro Gly Lys Thr Thr Ala Leu  
 370 375

1131

<210> 42  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> exon  
 <222> (1)..(402)

<400> 42  
 atg ccc agc ggc tgc cgc tgc ctg cat ctc gtg tgc ctg ttg tgc att 48  
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 1 5 10 15  
 ctg ggg gct ccc ggt cag cct gtc cga gcc gat gac tgc agc tcc cac 96  
 Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His  
 20 25 30  
 tgt gac ctg gcc cac ggc tgc tgt gca cct gac ggc tcc tgc agg tgt 144  
 Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys  
 35 40 45  
 gac ccg ggc tgg gag ggg ctg cac tgt gag cgc tgt gtg agg atg cct 192  
 Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro  
 50 55 60  
 ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc cac 240  
 Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His  
 65 70 75 80  
 agt ggc tgg gca ggc aag ttc tgt gac aaa gat gaa cat atc tgt acc 288  
 Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr  
 85 90 95  
 acg cag tcc ccc tgc cag aat gga ggc cag tgc atg tat gac ggg ggc 336  
 Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly  
 100 105 110  
 ggt gag tac cat tgt gtg tgc tta cca ggc ttc cat ggg cgt gac tgc 384  
 Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys  
 115 120 125  
 gag cgc aag gct gga ccc 402  
 Glu Arg Lys Ala Gly Pro  
 130

<210> 43  
 <211> 1199  
 <212> DNA  
 <213> Homo sapiens

&lt;220&gt;

&lt;221&gt; exon

&lt;222&gt; (37)..(1185)

&lt;400&gt; 43

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	Met Pro Ser Gly Cys Arg	
	1 5	
tgc ctg cat ctc gtg tgc ctg ttg tgc att ctg ggg gct ccc ggt cag	102	
Cys Leu His Leu Val Cys Leu Leu Cys Ile Leu Gly Ala Pro Gly Gln		
	10 15 20	
cct gtc cga gcc gat gac tgc agc tcc cac tgt gac ctg gcc cac ggc	150	
Pro Val Arg Ala Asp Asp Cys Ser Ser His Cys Asp Leu Ala His Gly		
	25 30 35	
tgc tgt gca cct gac ggc tcc tgc agg tgt gac ccg ggc tgg gag ggg	198	
Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys Asp Pro Gly Trp Glu Gly		
	40 45 50	
ctg cac tgt gag cgc tgt gtg agg atg cct ggc tgc cag cac ggt acc	246	
Leu His Cys Glu Arg Cys Val Arg Met Pro Gly Cys Gln His Gly Thr		
	55 60 65 70	
tgc cac cag cca tgg cag tgc atc tgc cac agt ggc tgg gca ggc aag	294	
Cys His Gln Pro Trp Gln Cys Ile Cys His Ser Gly Trp Ala Gly Lys		
	75 80 85	
ttc tgt gac aaa gat gaa cat atc tgt acc acg cag tcc ccc tgc cag	342	
Phe Cys Asp Lys Asp Glu His Ile Cys Thr Thr Gln Ser Pro Cys Gln		
	90 95 100	
aat gga ggc cag tgc atg tat gac ggg ggc ggt gag tac cat tgt gtg	390	
Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly Gly Glu Tyr His Cys Val		
	105 110 115	
tgc tta cca ggc ttc cat ggg cgt gac tgc gag cgc aag gct gga ccc	438	
Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala Gly Pro		
	120 125 130	
tgt gaa cag gca ggc tcc cca tgc cgc aat ggc ggg cag tgc cag gac	486	
Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys Gln Asp		
	135 140 145 150	
gac cag ggc ttt gct ctc aac ttc acg tgc cgc tgc ttg gtg ggc ttt	534	
Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val Gly Phe		
	155 160 165	
gtg ggt gcc cgc tgt gag gta aat gtg gat gac tgc ctg atg cgg cct	582	
Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu Met Arg Pro		
	170 175 180	
tgt gct aac ggt gcc acc tgc ctt gac ggc ata aac cgc ttc tcc tgc	630	
Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe Ser Cys		
	185 190 195	
ctc tgt cct gag ggc ttt gct gga cgc ttc tgc acc atc aac ctg gat	678	

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Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn Leu Asp
 200                               205                210

gac tgt gcc agc cgc cca tgc cag aga ggg gcc cgc tgt cgg gac cgt      726
Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg Asp Arg
215                               220                225                230

gtc cac gac ttc gac tgc ctc tgc ccc agt ggc tat ggt ggc aag acc      774
Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Gly Lys Thr
                235                240                245

tgt gag ctt gtc tta cct gtc cca gac ccc cca acc aca gtg gac acc      822
Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val Asp Thr
                250                255                260

cct cta ggg ccc acc tca gct gta gtg gta cct gcc acg ggg cca gcc      870
Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly Pro Ala
                265                270                275

ccc cac agc gca ggg gct ggt ctg ctg cgg atc tca gtg aag gag gtg      918
Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val
                280                285                290

gtg cgg agg caa gag gct ggg cta ggt gag cct agc ttg gtg gcc ctg      966
Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val Ala Leu
295                300                305                310

gtg gtg ttt ggg gcc ctc act gct gcc ctg gtt ctg gct act gtg ttg      1014
Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr Val Leu
                315                320                325

ctg acc ctg agg gcc tgg cgc cgg ggt gtc tgc ccc cct gga ccc tgt      1062
Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly Pro Cys
                330                335                340

tgc tac cct gcc cca cac tat gct cca gcg tgc cag gac cag gag tgt      1110
Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln Glu Cys
                345                350                355

cag gtt agc atg ctg cca gca ggg ctc ccc ctg cca cgt gac ttg ccc      1158
Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp Leu Pro
360                365                370

cct gag cct gga aag acc aca gca ctg tgatggaggt gggg      1199
Pro Glu Pro Gly Lys Thr Thr Ala Leu
375                380

<210> 44
<211> 1062
<212> DNA
<213> Homo sapiens

<220>
<221> exon
<222> (4)..(1058)

<400> 44
acc atg ccc agc ggc tgc cgc tgc ctg cat ctc gtg tgc ctg ttg tgc      48

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Met	Pro	Ser	Gly	Cys	Arg	Cys	Leu	His	Leu	Val	Cys	Leu	Leu	Cys	
1				5					10					15	
att ctg ggg gct ccc ggt cag cct gtc cga gcc gat gac tgc agc tcc	96														
Ile Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser															
			20					25						30	
cac tgt gac ctg gcc cac ggc tgc tgt gca cct gac ggc tcc tgc agg	144														
His Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg															
			35					40					45		
tgt gac ccg ggc tgg gag ggg ctg cac tgt gag cgc tgt gtg agg atg	192														
Cys Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met															
			50					55					60		
cct ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc	240														
Pro Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys															
			65					70					75		
cac agt ggc tgg gca ggc aag ttc tgt gac aaa ggc ttc cat ggg cgt	288														
His Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Gly Phe His Gly Arg															
			80					85					90		95
gac tgc gag cgc aag gct gga ccc tgt gaa cag gca ggc tcc cca tgc	336														
Asp Cys Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys															
														110	
cgc aat ggc ggg cag tgc cag gac gac cag ggc ttt gct ctc aac ttc	384														
Arg Asn Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe															
														125	
acg tgc cgc tgc ttg gtg ggc ttt gtg ggt gcc cgc tgt gag gta aat	432														
Thr Cys Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn															
														140	
gtg gat gac tgc ctg atg cgg cct tgt gct aac ggt gcc acc tgc ctt	480														
Val Asp Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu															
														155	
gac ggc ata aac cgc ttc tcc tgc ctc tgt cct gag ggc ttt gct gga	528														
Asp Gly Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly															
														175	
cgc ttc tgc acc atc aac ctg gat gac tgt gcc agc cgc cca tgc cag	576														
Arg Phe Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln															
														190	
aga ggg gcc cgc tgt cgg gac cgt gtc cac gac ttc gac tgc ctc tgc	624														
Arg Gly Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys															
														205	
ccc agt ggc tat ggt ggc aag acc tgt gag ctt gtc tta cct gtc cca	672														
Pro Ser Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro															
														220	
gac ccc cca acc aca gtg gac acc cct cta ggg ccc acc tca gct gta	720														
Asp Pro Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val															
														235	

gtg gta cct gcc acg ggg cca gcc ccc cac agc gca ggg gct ggt ctg	768
Val Val Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu	
240 245 250 255	
ctg cgg atc tca gtg aag gag gtg gtg cgg agg caa gag gct ggg cta	816
Leu Arg Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu	
260 265 270	
ggt gag cct agc ttg gtg gcc ctg gtg gtg ttt ggg gcc ctc act gct	864
Gly Glu Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala	
275 280 285	
gcc ctg gtt ctg gct act gtg ttg ctg acc ctg agg gcc tgg cgc cgg	912
Ala Leu Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg	
290 295 300	
ggt gtc tgc ccc cct gga ccc tgt tgc tac cct gcc cca cac tat gct	960
Gly Val Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala	
305 310 315	
cca gcg tgc cag gac cag gag tgt cag gtt agc atg ctg cca gca ggg	1008
Pro Ala Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly	
320 325 330 335	
ctc ccc ctg cca cgt gac ttg ccc cct gag cct gga aag acc aca gca	1056
Leu Pro Leu Pro Arg Asp Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala	
340 345 350	
ct gtga	1062